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Medicine Chests

By LAWRENCE B. ROMAINE

The "Riddles & Replies" column of the magazine *Antiques* for September, 1938, carried an inquiry from Mr. Lockwood Barr, of New York City, asking for the working dates of one N. Starkey, No. 66 South Fourth St., Philadelphia. The inquiry carried a picture of a finely made medicine chest on which appeared Mr. Starkey's label, indicating that he would gladly supply people with similar equipment. Having a chest of almost the exact proportions and workmanship, (Fig. 1), with brass inlay, whale-ivory knobs on the drawers, and a secret compartment in the back for narcotics, I decided to find out something about these small masterpieces of the early nineteenth century.

An inspection of about a hundred newspapers discovered many advertisements. Boston, New Bedford, Fall River, Providence, New Haven, New York and Philadelphia papers all contained notices of the fitting of medicine chests, whereas those published inland carried very few. This would bear out the information given to me about the chest with the whale-ivory knobs; that it was carried and used on shipboard by the captain, and that the compartment at the back, where the narcotics and harmful drugs were kept, was concealed so as to hide them from the rest of the crew, considered too ignorant to apply them properly. I do not mean to imply that such chests were only made for ships and never used by doctors. I think it indicates that generally they were intended for ships but were used on land as well as sea. The following advertisement from the *New Bedford Weekly Register* for June 22, 1831, is typical:

"T. E. Gage, Drugs and Medicines, Union Row, is constantly receiving Medicine Chests fresh and from various sources; replenished or furnished at short notice and on very accommodating terms. N.B. A light is kept burning during the night so that medicine may be had at any hour."

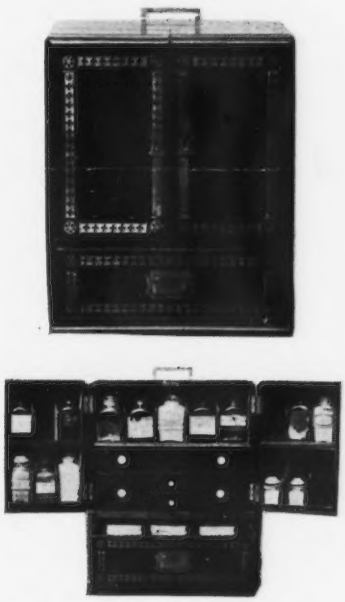


Fig. 1. SHIP CAPTAIN'S CHEST
Closed and Open

None of the advertising, however, definitely states that the chests were made by the purveyor of drugs and medicines. Going through fully as many cabinet maker's advertisements, I found that very few thought to mention medicine chests. Occasionally a notice offered "mahogany desks and medicine chests." It is my own conclusion that these pieces, some made with the same care that produced the excellent highboys, sideboards and clock cases of this period, were made

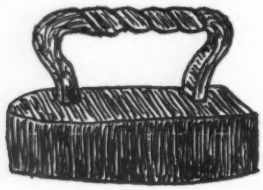
(*Continued on page 83, column 3*)

The Tailor

By WILLIAM B. SPRAGUE

The equipment of the old-time tailor was comparatively simple. It consisted of a pair of shears, one or more of scissors, a thimble, a supply of needles, a flatiron, a goose, a bodkin, pressboards, long strips of paper or parchment for measuring, and sometimes a set of button-hole cutters with accompanying hammer. All of these, except as hereafter noted, took much the same form as they do today. The shears and scissors, often forged out on the blacksmith's anvil, were usually heavier and clumsier than the modern ones. The thimble was always open at the end of the finger, although, according to one authority of 1820, this "has never been fully accounted for." The goose was in the nature of a flatiron, with a face from eight to nine inches long, and only two and a half or three inches wide, weighing between ten and fifteen pounds. A horseshoe often served to stand it upon, when hot. It was used for pressing out the seams; the other iron for smoothing the flat surfaces. In taking the measure of the customer, the tailor marked the strip of paper or parchment with the scissors "after a way peculiar to himself; for there is no universal procedure about this." The measuring and cutting was done by an expert, often the proprietor of the establishment, and the sewing by less skilled workers, who sat on a table in a cross-legged position. The button-hole cutters were probably not in every tailor shop. None of the "books of trades" mention them, and one speaks of "a small pair of scissors for buttonholes." They are well known, however, to the collector of tools of the trades, and are usually found in sets of three or more sizes, with edges ranging down from one inch in length. They are really in the nature of double-beveled chisels, although in shape more like a miniature

garden spade, with the blade and handle all of one piece of steel. If the set is complete, it will include a small all-metal hammer, with which the handle of the cutter was struck, to make the slit. However, one cutter is known with a cross handle of wood, similar to that of a gimlet or corkscrew, evidently intended to be worked merely by hand pressure. We venture to repeat, at this appropriate point, a quotation which appeared in one of our early issues: "A master tailor ought to have a quick eye to steal the cut of a sleeve, the pattern of a flap, or the shape of a good trimming, at a glance: any bungler may cut out a shape when he has a pattern before him; but a good workman takes it by his eye in the passing of a chariot, or in the space between the door and a coach: he must be able not only to cut for the handsome and well-shaped, but bestow a good shape when nature has not granted it: he must make the clothes



Tailor's Goose

sit easy in spite of a stiff gait or awkward air: his hand and head must go together: he must be a good cutter, and finish his work with elegance." As the tailor "is obliged to give long credit, he cannot afford to do so without considerable profit; which is generally laid on to countervail the risk and time, with a handsome percentage for his indulgence."

BIBLIOGRAPHY

Books of Trades by Trusler (1791), Oliver & Boyd (1820), Rivington (1827), Hazen (1837), Griffin (1848), Routledge (1866). (The last-named goes into great detail as to the various kinds of stitches used by tailors.)

Wheeler's *North American Almanack* for 1790, contains the following receipt:

"To keep arms and other polished metals from rust: One ounce of camphire, two pounds of hog's lard; dissolve them together and take off the scum; mix as much black lead as will bring them to an iron colour; rub your arms etc. over with this and let it lie on for twenty four hours; then clean them with a linen cloth and they will keep clean many months." L. B. R.

Peat—An Old Time Fuel

By George Francis Dow

[Reprinted from *Old-Time New England*, October, 1930, with the kind permission of the Society for the Preservation of New England Antiquities.]

Before coal came into common use in New England the householder was dependent upon the woodpile and the peat meadow for his fuel. In early days wood was easily obtained and lavishly burned, but the huge fireplaces of the seventeenth century were reduced in size by the year 1750 and seventy-five years later were built still smaller. Then followed the small box-shaped cooking stoves and soon after the coal stoves. Anthracite coal was introduced into New England about the year 1828, but its use did not become general until some years later.

A century ago many New England farmers owned not only a wood lot from which the supply of fuel was cut but also a peat meadow. Nearly one hundred towns in Massachusetts have peat deposits from one to seventy-five feet in depth. Hitchcock, writing in 1833 in his *Report on the Geology of Massachusetts*, estimated about one hundred and twenty-five square miles of peat meadow in the state. He observed that the use of peat as a fuel "was rapidly increasing especially in the eastern part of the state where fuel is more expensive." This was particularly true in the cities and larger towns where the supply of wood had long been cut off, necessitating the hauling of firewood from some distance or freighting it in small vessels from the coast of Maine or even Nova Scotia. As late as the winter of 1864-65 peat cut from meadows in Barnstable County was sold in Boston in considerable quantity at $8.50 a ton or forty cents a bushel. Coal at this time was selling at seventeen dollars a ton and wood at sixteen dollars a cord.

There are very large deposits of peat in Essex County, Massachusetts, and during the first half of the nineteenth century several days each year were usually spent by farmers in that locality in cutting peat for the winter's supply. This industry continued until the introduction of coal which began to be used by the farmers about the year 1854. The new fuel was so much cleaner than the peat and required so little labor to obtain it, that by degrees the peat meadows were neglected, the small houses built to dry the peat fell into decay and now the whole industry is forgotten.

"In its day the peat meadow was as essential to the comfort of the household as was the wood lot. My grandfather owned two meadows from which the peat was cut each year. The light peat was used to burn in the spring and fall and the hard or heavier quality was used in the winter to keep the fire through the night in the fireplace. I well remember being told how to fix the fire for that purpose. The ashes were pushed back, the coals allowed to kindle to a bright red, then a block of peat about four inches square and fifteen to eighteen inches long would be layed on the coals, a second piece placed on that, then ashes piled around and over the top. It then was safe till morning. When raked open, the fire for the day was started with the help of the half-burned peat. The

Topping Knife
(About 4 feet long)

great objection to its use was the odor, penetrating and peculiar. It also was a dirty fuel for the fine particles would break off as it was brought into the house in baskets. The peat was cut in the meadow with a long, narrow spade in blocks about four inches in diameter and fifteen to twenty-four inches long. When cut these blocks were layed on a wide board at the side of the ditch and afterwards were removed to a suitable place to dry by a helper who lifted them with a peculiar fork with spikes for teeth. (See cut). They were piled up to dry for a few weeks and then would be housed in a small building standing on the meadow, called the 'turf house.'

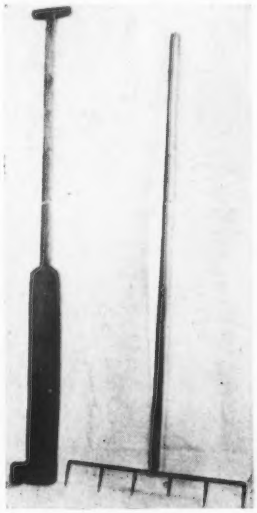
"As the peat was found in the meadow there would be a thick mass of grass roots which was removed with a tool called a "topping knife," a strong blade like a short scythe set in a handle at such an angle that the weight of the workman as well as his strength forced it into the ground. (See cut). Every farm had a set of these tools. As a boy I often heard the talk of the neighbors about the

different qualities of the peat and well recall the remark of a man of picturesque language: 'By tarnation! I had just as soon have a sheet of paper to burn as a cord of peat from Wenham casey meadow. If you want peat to burn you go cut it over in "Blind Hole" where it is so good that a piece not bigger than my hat will heat the house so hot when it's down to zero that my wife had to open all the doors and windows.'

"The price for a cord of peat was from five to eight dollars and many who could not cut or who did not own peat land, bought from neighbors. A familiar sight was the ox-team and its load of peat in the street of our Village in those now distant days." (Charles J. Peabody in *Topsfield Historical Collections*, Vol. XXVI, p. 120).

The best peat is found in meadows that have been cleared of trees and brush for years and are well drained so that the surface becomes dry. When the turf is removed, or sliced off by the use of the "topping knife," the upper layers as cut away are usually quite fibrous and full of leaves, roots and sticks, but farther down these disappear and the deposit grows darker in color and more compact. The upper layers are usually light brown in color and when dried the blocks burn readily with a considerable flame and little smoke. This is the kind that was generally used. The blacker, heavier peat contained fewer roots, burned more slowly, with less flame, gave out less heat and consumed to a heavy yellow ash. The latter kind sometimes was quite black in color and composed of mosses and aquatic plants in varying stages of decomposition closely representing the first step from vegetable substance to mineral coal. When freshly cut this peat is saturated with water to the extent of forty to ninety per cent according to locality and density and even when thoroughly dried in the air it will retain considerable moisture for a long time.

Peat was formerly cut at any time between May and September but usually between the middle of August and middle of September. If cut earlier than August fifteenth the peat would dry too rapidly and be more likely to crack and crumble when handled. After "topping," a trench would be cut with perpendicular sides and from these sides the blocks of peat, about four and a half inches wide and fifteen to eighteen inches long would be cut by means of the "cutter" which in England is known as "the slane." It is a narrow, spade-like tool with a long, straight handle, having at the cutting end a cutting wing placed at a right angle so that long right-angle blocks of peat may be cut by a single motion. (See cut). The cutting of a block of peat may be described as consisting of five motions: (1) sinking the "cutter" perpendicularly to the intended depth; (2) starting the block by pushing the long handle a little forward; (3) inclining a little from the side to separate the block in that direction; (4) bringing the "cutter" to perpendicular again; and (5) raising the block of peat. Not infrequently the trench would be partly filled with water and the under-water section required a peculiar knack to raise the blocks to the bank where they would be laid out in rows like bricks to dry.



Peat Cutter or "Slane" and Peat Fork

Here they would be turned at intervals so as to expose the surfaces to the sun and air and after a time be piled or cobbled in heaps allowing a circulation of air. A few weeks later the blocks would be carried to the "turf house" where the drying-out process continued until the meadow froze over and the peat could be hauled to the house or taken to market. The "turf house" was a common sight in Essex County meadows a century ago. Beside the "Valley Road" in Topsfield, bounded at one side by the "Wenham Causeway," there is a meadow of about a dozen acres, now much overgrown with bushes and young growth, where might be seen, barely seventy years ago, more than a dozen disused "turf houses," slowly decaying and falling to the ground. It is a curious fact that a peat excavation becomes filled up rapidly by a natural growth of vegetation and in thirty or forty years the surface appears much as before.

These peat meadows possessed a recognized value, a century ago, as there was a ready market for the peat when cured and fit for the fireplace. In the *Columbian Centinel*, of September 28, 1822, is printed the following advertisement:

"Peat Meadow. To be sold at Public Vendue on the Premises, on Monday, 30th Sept. instant.

"About an acre of Peat Meadow, lying in Malden, with a House upon it, for the purpose of housing peat, of the dimension of 32 by 16 feet, capable of holding more than 30 cords: together with 6 or 7 cords of dry Peat, already in the house.

"Also — a light slat Box, made to put in a wagon or sled, that measures just a cord and a half of peat. Pay 20 per cent on receiving the deed — the remainder in 90 days."

In those days it was considered a good day's work for two men, or a man and a husky boy, to cut out and spread a rod square of peat meadow. A rod square, cut two splittings deep, each splitting of the average length of eighteen inches, would give three cords of peat when dry. The blocks of peat when cut would weigh from fifteen to twenty-five pounds, depending upon the fibrous nature of the turf.

In recent years efforts have been made to utilize this great body of potential fuel and at the present time there is a National Peat Association actively at work. Should the high cost of coal continue it is not beyond the bounds of possibility that the great peat deposits of New England, now looked upon as waste lands, may assume unexpected values and peat in compressed form become an article of merchandise in common use in many households and factories.

Medicine Chests

(*Continued from page* 81, *column* 2)

on order for individual doctors and ship's masters. I doubt if the best examples could be found "in dozens" at the druggist's. Those that could were perhaps more like the square mahogany example (Fig. 2) or the leather-covered box (Fig. 3). (Note "Dr. Thomas' Order Box" shown in the same cut. This hung in the "general

store" long before the days of the telephone and here Dr. Thomas looked every day for his less urgent calls.)

Some of the books of the period carried almost as much advertising as the newspapers. In Joseph Blunt's

Fig. 2. Chest of Standard Type

Merchant's & Shipmaster's Assistant, New York, 1822, I find:

"Moses S. Little, Drugs and Medicines, 34 Park, one door South of Beekman St., N. Y. Ships and Private Families supplied with Medicine Chests."

"Ashfield & White, Druggists, corner of Beekman and Water Streets, N. Y. Ships and Family Medicine Chests put up in a most superior style."

I am indebted to Wells' Historical Museum for the following, painted on a gilt background on one of their medicine chests: "Put up by Dubose Roff, Druggist, Mobile, Alabama." This piece is large, made of mahogany with inlay, and is reputed to have belonged to one Dr. Thigpin, of Montgomery, Alabama.

Taking Fig. 1 as a working model, it might be interesting to inspect a chest carefully. Closed up and ready for travel, it is but a box of mahogany with brass inlay. Opened, it looks almost like a miniature secretary. The larger drawer at the bottom holds the mortar and pestle and mixing bowls. The smaller drawers contain scales, boxes of powder and small instruments. The two wings and the top of the chest, as can be seen, are given up to small compartments that exactly fit the small square bottles. At the back, is a sliding panel, concealing a row of compartments for bottles of poisonous medicines. (On two chests that I have had, these were so well made that I did not discover them for some months.) Incidentally, all the bottles in this chest bore labels made in Philadelphia.

I am again indebted to Wells' Historical Museum for the following list, which appears on the label in another chest:

Contents of Bailey's Family Medicine Chest.

Aqua Ammonia.—Useful in Fainting, Heartburn, Stings of Bees, Bites of Serpents, Dogs, etc.

Tincture or Spirits of Camphor.—Useful in Nervous Diseases, Spasms, etc. Externally in lameness, sprains, wounds, rheumatism, etc.

Castor Oil.—Useful as cathartic for children in Dysentery, Diarrhoea, Colic.

Tincture or Essence of Ginger.—Useful in Cholera Morbus, Winds in Stomach.

Fig. 3. Country Doctor's "Order Box" and Chest

Paregoric Elixir.—Useful in Coughs, Asthma, Nausea and promotion of sleep.

Tincture Muriate of Iron.—Useful in low feeble conditions of the blood.

Ipecac.—Used as a safe and reliable emetic or to produce sweating.

Chlorate of Potassa.—Useful in canker rash, ulceration of throat, catarrh.

Glycerine.—Useful in chapped hands and scabby, skin diseases.

Olive Oil.—Useful in burns and as a liniment.

Dover Powder Pills.—Useful in nervous diseases, for sleep, perspiration.

Quinine Pills.—Useful as a tonic, weak conditions of blood, malaria.

Laudanum (Poison).—Useful for pain, earache, toothache, dysentery, etc.

Tannin.—Useful in astringent in sore throat, canker, etc.

Aconite Pellets.—Useful in scarlet and rheumatic fever, pleurisy.

Belledonna Pellets.—(Homeopathic). Useful in convulsions, spasms, epilepsy, neuralgia and all conditions of the nervous system.

(Cook & Sons, Steam Printers, Milford, Mass.)

It is hard to make definite statements as to date and maker but it would seem probable that similar medical chests were made and in use, both on land and sea along the Atlantic Coast, during the period from 1820 to 1850.

At the same time, the country doctor was carrying the crude leather-covered box (Fig. 3), and the housewife had on hand the old pine chest with small wood partitions (Fig. 4). The former came from the descendants of a doctor in Foxboro, Mass., and was used from about 1840 until 1870. Its construction is interesting. The interior is nothing but a block of pine with two dozen holes bored through it for the bottles. It is covered with heavy hand-tooled leather and has a strong leather handle, quite different from the handsome mahogany inlaid chests advertised in the papers of the eighteen-twenties.

However, it is impossible to prove just what the advertisements mean and the only real facts we have are the labels on the chests themselves. It is most unfortunate that the stereotype founders of the period did not make a cut of one of these grand little chests instead of the bottles, jars, fancy topped vials and the eagle holding the ribbon marked "drugs".

Further information about these old medicine chests would probably fill a

Fig. 4. Housewife's Chest

book or two if one could find the time to devote to literature of the period. It is strange that there were not more broadsides and other advertising that actually pictured or described the medical chests. Perhaps other members have chests with histories that will produce more definite information.

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Communications should be addressed as follows: Pertaining to the *contents* of THE CHRONICLE, to W. B. Sprague. Suggestions for prospective members to Miss Eleanor Hudson. Other matters, to Burton A. Kollmer. Addresses as here given.

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Our Purpose

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

Dues

The annual dues are payable September 1st, and are as follows: Regular members $1.00; Contributing members, $2.00; Supporting members, $5.00; Sustaining members, $10.00, and up. There is no distinction between the classes, except the amount of the dues, but the publication of THE CHRONICLE cannot be financed unless a considerable number of the members pay more than $1.00. Each member is expected to voluntarily place himself in the class which represents the amount he is willing to contribute to the support of the Association for the current year. THE CHRONICLE is sent to all members without additional charge. Many of the back numbers may be secured from the Treasurer for 20c each, and a twelve-page index to the twenty-four numbers of Volume I, containing a useful bibliography, for $1.00 each. For further information, address any of the officers.

South County Museum

South County Museum, at North Kingston, R. I. (eighteen miles from Providence on Snake Lane, Route 2), provides a vivid and accurate background for history by showing how people lived, worked, and played in old-time Rhode Island. It is an exposition of human life and activity — a re-creation of the many-sided life of the past for the education and inspiration of the future.

Here the visitor may see how the colonist built his home and made it comfortable: how he tilled his fields and kept his live-stock; how he spun yarn, wove cloth, and made clothing; how he healed the sick; how he cared for his children and educated them; how he hunted and fished and traveled and traded by land and by sea — in short, how he lived from cradle to grave. The wooden plow of the farmer, the hand loom of the weaver, the great-wheel lathe of the turner, the cooper's croze, the pots and skillets of the housewife, the quadrant of the mariner, the toys and games of children, and thousands of other articles, large and small, that once played a vital part in everyday life are shown in appropriate surroundings. The tools and products of the various craftsmen and artisans are gathered into small shops and kept in running condition. Frequent demonstrations are given by skilled workmen and new treasures are added constantly.

South County Museum is in the center of a region rich in historic tradition. Near by are the site of Roger Williams's trading post; Queen's Fort, used by the Indians in King Philip's War; Cocumcussoc, built by Richard Smith, Jr., in 1677; old St. Paul's Church, Wickford, built in 1707; the birthplaces of Nathanael Greene and Gilbert Stuart; and many fine colonial homes. Picnic groves with fireplaces, maintained by the State, make the Museum a splendid base for an interesting and instructive day.

Admission 25 cents. Special rates for schools and large societies.

The Flail

Threshing or *thrashing* is, of course, the process by which the husks of grain are broken so as to permit the escape of the kernels. In ancient times everywhere, in the English-speaking countries at least down into the 18th century, and in the Orient until very recently, this was often done by driving horses or oxen around in a circle over the grain, which was spread on a wooden or hard-packed earthen floor. However, the flail, the hand instrument designed and used for this purpose, unquestionably dates far back of the colonization of this country. Willich's Domestic Encyclopedia (1821) describes its construction as follows: "1. the hand-staff, or piece held in the thresher's hand; 2. the swiple, or that part which strikes out the corn; 3. the caplins, or strong double leathers, made fast to the tops of the hand-staff and swiple; 4. the middle band, being the leather thong or fish-skin, that ties the caplins together." Oak and hickory interchangably were the favorite materials for the "hand-staff" and "swiple." The "caplins" were often loops of some pliable wood, such as hickory or ash, instead of leather, and the "middle band" was sometimes composed of eel skin. Machines for threshing were developed and perfected during the first half of the 19th century, and flails correspondingly fell into disuse, but one sees them hanging in New England barns today, and is told that they are still convenient when a small job of threshing is to be done, especially, as in the case of rye, where there is a definite use, such as binding corn, for the straw, which would be practically destroyed, if put through a machine. In Vol. V of the *Papers of the Bucks County Historical Society*, which can be found at almost any of the larger libraries, there is an excellent article entitled *Ancient Methods of Threshing in Bucks County*, illustrating several types of flail, and describing many others.

From Suffolk Deeds Lib I.42 (1643): ". . . three thousand of Clapboard bolts lyeing at my Ladie Moodies Beach in Linne . . . (This implies that clapboards were to be "cleaved" or rifted from said "bolts.")

"Thomas Errington granted . . . his house & land at Salem & his corne at his house in Charlestowne, in Consideration of ten thousand pipe staves cleaveing by him. Thomas Errington pviding the bolts." L. L. T.

The Chronicle

Molded Candles

By G. A. R. Goyle

The invention of molded candles must have been a revolutionary step in the history of lighting appliances, and yet about its origin nothing very definite is known.

Le Brege of Paris (or, according to Knight's *American Mechanical Dictionary*, the "Sieur Le Brez" of Paris) is said to have invented the molding of candles early in the eighteenth century. The definite mention of an inventor of this process is interesting, but linking it with the eighteenth century cannot be correct.

F. M. Feldhaus (*Die Technik der Vorzeit*, Leipzig and Berlin, 1914) says that molded candles were known in the first half of the seventeenth century and that glass and sheet-iron molds were used. The invention of pewter forms he ascribes to Freitag of Gera, Germany, in 1760.

Knight informs us that the Marquis of Worcester in his *Century of Inventions* of 1655, speaks of "brass candle-molds in which a man may make 500 dozen in a day. He adds an ingredient to whiten, cheapen, and render the candle more lasting."

Walter Hough (*Collection of Heating and Lighting Utensils in the U. S. Natural History Museum*, Washington, D. C., 1928) does not give any information about the origin of the molded candle beyond the statement that "an ingenious method of molding candles in paper tubes was worked out by the Japanese." Their inspiration, however, may have come through Dutch influence at Deshima, in the harbor of Nagasaki, where the Dutch East India Company carried on trade with Japan to the exclusion of any one else until 1854. In 1927, I acquired a socketed candlestick in Nagasaki, a relic of the Dutch in Deshima. It is now the property of the Mercer Museum in Doylestown, Pa. Contrary to Japanese usage, it has a socket to receive a molded candle. The Japanese candlesticks are so-called "prickets"—similar to the European candle-holders of medieval times—fitted with a thorn to hold the candle. To this day, the large petroleum companies which sell the Japanese paraffin candles furnish them with holes in the bottom to fit the pricket candlesticks.

Many years ago, when Dr. Henry C. Mercer visited the Inishnee Island in the Bertraghboy Bay, Connemara district, Western Ireland, he gathered much interesting information about the primitive doings of the natives. Among other things he was told that candles are molded by punching a hole in peat, inserting the loose wick and pouring in the hot grease. After it has cooled the molded candle is pulled out of the hole. (Dr. Mercer's letter to the writer, of November 8th, 1923.)

As early as 1750, the chandlers of Boston kept molded candles in stock, to be sold by the box or by retail. The *Boston Gazette* of July 24, 1750, carries a notice of Edward Langdon, near the Old North Meeting House, in which he offers for sale "good old Candles both Mould and Dipt, also Mould Candles of Bayberry Wax." By 1758, candle molds had already become household articles. In the same *Boston Gazette*, of April 24, 1758, John Welch, of Hanover Street, Boston, "purposing to go for England in a short time," offers his household goods at public vendue and lists among a multitude of articles "two Dozen of Candle-Moulds, some large and rib'd."

I have never seen ribbed candle molds in any collection. No doubt, they were soon considered impractical and no longer produced. Fluted candles, which they produced, may have been pretty to look upon, but they surely must have encouraged guttering, which would spoil the appearance and usefulness of the candle before it was half consumed. "Mould Candles, plain and fluted," were offered for sale in the *Boston Gazette*, in the issues of February 20, 1753, and of January 24, 1763.

John Anderson in his *Almanack and Ephemeris* for 1775 offers the following remarks on industry of the period:

"From an impartial writer on the British Traffic and Trade: As to the foreign traffic, the woolen manufacture is still the great foundation and support of it. To Holland, Germany, Turkey, Russia, Spain, Portugal and the East and West Indies we export vast quantities and from some places a balance in treasure. But the most profitable trade we have is with our own Colonies in America, which we furnish with most of their clothing and furniture. Those colonies would in short time be able to take all the manufactures we could spare and give us a considerable balance in treasure." L. B. R.

Bicycles

The earliest type of bicycle, called "dandy horse," which had no pedals but was propelled by alternate thrusts of the rider's feet which reached the ground on each side, was introduced in this country about 1820. It was not until 1866 that the pedal idea was brought from France and patented here, the pedals being attached to the hub of the front wheel and, of course, communicating to it only the same number of revolutions which they themselves made. While officially known as "velocipedes," the first ones, very heavy, with iron tires and no spring in the seat or in the frame, were often called "bone-shakers." Rubber tires, however, superseded the iron ones in 1868, and the machines were extremely popular for a period of a few years, even justifying the existence of a periodical with the title

Bicycle of the 1860's

of "The Velocipede." The average speed attained by them was 12 to 13 miles per hour, and one rider covered 123 miles in 24 hours. The "high-wheeler," so designed in order that greater distance would be attained by each revolution of the pedals, followed in 1878.

E. B. Jupp, in his *History of the Carpenters Company* (of London), states that the by-laws of the company prescribed the following dimensions for timbers: rafters, 12'x4½"x4" at large end and 12'x4"x3" at small end; joists, 8'6"x6"x4"; puntions of oak, 6'6"x6"x4"; bedsides, 6'6"x10"x2"; double quarters, 8'6"x4½"x3"; stable planchs, 6'6"x12"x2"; planch boards, not less than 1" thick; quarter boards, 1" at the thicker edge, ⅓" at the thinner; seelinge boards, ½" at the thicker edge, ⅓" at the thinner. L. L. T.

Early American Industries Association

Membership

Membership lists should be amended as follows: (N) indicates new member; (S) indicates non-member subscriber; (C) indicates change of address; (D) indicates decease; (R) indicates resignation; (Co) indicates correction.

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Cannondale: Zimmerman, Miss Edna M., The Heirloom (N)
Greenwich: Mitchell, John M., P. O. Drawer 409 (N)
Ridgefield: Curry, Douglas (N)

MASSACHUSETTS

Auburndale: Groby, John M., 24 Duffield Rd. (N)
Northampton: Forbes Library (S)
Springfield: Todd, Abbott R., 79 Edgemont St. (N)
Wellesley: Bissel, Mrs. Paul A. (R)
Worcester: Gage, T. Hovey (D)

NEW JERSEY

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Morristown: Keller, Albert T., Washington Valley Rd. (Ch)
Passaic: Fairchild, Mrs. Paul A., 240 Gregory Ave. (Ch)

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Albany: Garrett, Frank Lee, 63 Chestnut St. (N)
Amenia: Sutton, Frederick J. H. (Ch)
Flushing: Carrigan, Matthew L., 45-64 168th St. (N)
Hudson: Ganzenmuller, Harry R., 219 Allen St. (N)

VERMONT

Arlington: Abrams, Capt. Horace, Tory Hollow (N); Young, William H. (N)

Wooden Screw Threading

From MR. NEWTON C. BRAINARD:

"I have just come across some interesting information on the question of screw cutting in the *London Illustrated News* for May 13th. It is a double page, showing model machines made from the drawings of Leonardo da Vinci which date before 1500. One is a double-spindle screw-cutter. On either side of the block to be cut and geared to it are a right and left-hand screw, which traverse along it a cross block with a cutting blade, held similar to the blade of a wooden plane. The center rod is turned by a crank. There is also a screw-cutting lathe, driven by a cord and spring pole connected with a treadle. The manner of advancing the carriage on this model is not apparent. Several of the other machines, such as printing presses, are operated by screws so that a mechanical method of producing them was, undoubtedly, desirable. I do not know where a complete account of this memorial exhibition held in Milan is available but it would seem to be worthy of a note in THE CHRONICLE, since it anticipates so many of our modern machines."

From MR. J. EARLE BACON:

"I was much interested in Mr. Brainard's letter on page 72 of the April CHRONICLE. It was suggested to me by an old gentleman, nearly ninety, that the method of cutting the big cider-press screws was to set up the stock in a long-bed great wheel lathe and turn it around. Then a sticky string was wound around it spirally and careful marks made, following the string. The string was then removed and the cut started with a file. Then a lathe tool was brought into use and *made* to follow the spiral, while two men slowly turned the stock with a rope around each end with a couple of turns each. He said it was a very slow process. He also stated that a neighbor of his later made a gadget to carry the tool-rest along with the thread, essentially like a grandfather of the modern screw-lathe. I rather hesitate to offer this, as it is little more than gossip, and rather reminds one of the chap who says: 'My grandmother's second cousin twice removed said that her next-door neighbor's cousin said that she had seen a gravestone somewhere with an epitaph reading so-and-so,' but you are welcome to it for what it is worth. Mr. Albert Lownes tells me that Besson's book, published in 1582, describes lathes for turning screws, but it is presumably in French, which I cannot read."

Mr. Bacon's letter was referred to Mr. Brainard, who rejoined as follows: "Mr. Bacon's letter seems to be leading in the right direction. The reference to a "sticky string" agrees with another account told me a while ago. This was cotton twine dipped in pitch which held it in position. When wound around the cylinder and adjusted for correct spacing one end of the string was lit and it burned like a fuse, leaving a spiral guide line on the surface of the work.

A second glance at the devices of Leonardo show that the spring pole lathe which I mentioned had a stationary tool post while the head bearing for the left center was a screw and nut making about one full turn. As the work was revolved it was drawn sideways past the tool post by the screw thread instead of the customary way of having the tool post travel past the work. After a section was completed, the post was shifted to the end of the first cut and a new section begun until the piece was all threaded.

The above is a crude description and probably means little without a picture of the model. This plan was ingenious but I feel that it has a number of difficult problems. One is the holding of the work; another the making of a screw perfect enough to work while cutting it in sections. Also, the registering of the work and the tool post. Under the best of these devices, I think that it was a slow process, as Mr. Bacon says.

A friend of mine who looked at the picture of the first model showed how easy it would be to compensate for different diameter of screws and pitch of the thread by gear changes which would be possible at the head of the machine."

A letter received by the editor of the London *Mechanics' Magazine* in 1835, read as follows:

"Sir: Permit me to extend to the public through your widely extended Magazine a hint or two from an old traveller, on the subject of stage-coach ventillation. Many others as well as myself have doubtless been annoyed by the aerophobia of many who travel by our public conveyances, and the pertinacity of such persons in keeping the windows closed, for fear as they say, of catching cold. Such persons have yet to learn that catching colds are more frequently the consequence of closely confined air in badly ventillated apartments, than of free exposure to wind and weather. Some people seem to regard fresh air as poison and do all in their power to exclude it; for my own part, I think it the only blessing of Providence that can not be taken to excess. The mode of ventillation that I would suggest, is simply this, that the sashes of mail and other passenger stage-coaches, instead of being glazed as at present (the panel formed is of a pane of glass) should be made with wire gauze, such as is now extensively in use for window blinds. The vehicle would by this means be amply ventillated without annoyances to anyone through currents of air; and, in case of rain, the sashes might be kept up without the choice of evils at present experienced, either to be wet through or suffocated.—An Old Traveller."

L. B. R.

COMMUNICATIONS

Mr. Newton C. Brainard has it, on good authority, that the set of tubes, illustrated and described on page 64 are cutters for use by a pastry cook.

ANONYMOUS:

"Mr. Sandford's article in Vol. II, No. 7 interested me very much, particularly with its reference to the Hainault or Flemish scythe, and the

USE OF HOOK WITH SICKLE

hook that was held in the left hand to assist the work. Both of these tools are occasionally found in Schoharie County, New York, where the Holland Dutch and their descendants have always predominated. Although they are now rare, local tradition has it that, by many farmers in that section, they were preferred to any other reaping tools, until displaced partially by the cradle and entirely by the machine. A similar hook is still, in emergencies, used in rural England, in conjunction with the bagging hook, also mentioned by Mr. Sandford. A photograph in the London *Sphere*, September 19, 1931, shows a reaper, posed with both of these tools clearly portrayed, and the caption reads as follows: 'The long abandoned bagging-hook or sickle has come into its own this harvest time, for the rain has caused the grain to lie so badly that modern machinery cannot touch it and recourse has of necessity been had to this primitive instrument and its concomitant, the small one-toothed rake—to the joy of the intensely conservative gaffers of the village inns.' I am sending you an illustration, which appeared in a recent issue of the National Geographic Magazine, (I do not have the exact date), stated to be a scene from Worcestershire. Although modern, you may see fit to reproduce this, as it shows the exact method of handling these tools, which, we can fairly assume, was learned by this farmer from his forbears.

And let us hear no more about "left-handed" sickles. The New York *Sun*, of May 13, 1931, contained a report of a recent discovery of Roman ruins in Jugoslavia, including the following remarkable statement: "Eight sickles, all made to be used with the left hand, were found in the storeroom. As other Roman sickles found in this region have the same characteristic, it is assumed that the district was populated by a tribe of left-handed persons." Not infrequently, one hears of the discovery of that outstanding rarity—a 'left-handed sickle.' The answer is — 'Try and find a right-handed one!' Of course, the mistaken assumption is based on the fact that the grain sickle, when held in the left hand, has its bevel uppermost, which, to the uninitiated, would seem the natural way to use it. However, Dr. Mercer, in his *Tools of the Nation Maker* says (No. 13) 'Sickle. You reap, holding in right hand, bevel down, grasping grain with left.' This is confirmed by numerous other authorities. As to the Hainault scythe, pictured in Knights' *American Mechanical Dictionary*, page 2080, the author says 'The blade is 27 inches in length, the point a little raised, and the entire edge beveled upward, so as to avoid the surface of the ground and the frequent use of the whetstone.'"

From MR. L. L. THWING:

"In my article on stoves in THE CHRONICLE for March, 1936, (Vol 1, No. 16) is the following statement: 'Down to the 15th century, and later, the only heat in an English castle was an open fire in the middle of the hall. There was no chimney and the smoke escaped through a sort of cupola, called a smoke louver.' On re-reading, this seems to be too broad a statement, as we can never be quite certain about such things, but, in general, particularly in the case of castles outside of the cities, I still see no reason to modify the above. Since this was written, however, I have come upon definite evidence that at least two chimneys were built in London as early as the 14th century.

An existing contract and specifications for a London house dated in 1308, provides that a room opening out of the great hall, and also the kitchen, shall both be provided with a 'camino' or chimney. This meant, at this time, a fireplace, but fireplaces were connected with chimneys, even if the 'chimney' was no more than a hole slanting upward through the outside wall. Thomas Allyn Skinner, for whom this house was built, was probably not the first in London to have a fireplace and chimney, so we may safely assert that chimneys were known in London in the latter part of the 13th century. How common they were and how tall they were is uncertain.

There is evidence that chimneys in their present form were known in certain parts of Italy in the 12th century. In a miniature painting of that period, a photograph of which is in the Fogg Art Museum, chimneys are clearly shown in the background. They extend above the roofline at the eaves, and have every appearance of having more than one flue. It is known that chimneys were first used in Italy. This picture seems to indicate that they were chimneys in their modern form, so there were probably cruder chimneys before this. There is no evidence that Roman civilization developed anything better than a short stack or pipe over an oven or open fire."

A member has furnished us with the photograph shown below of a recent acquisition.

BUTTER-WORKING MACHINE

This was for consolidating newly-churned butter, pressing out the superfluous fluid and working in the salt. It consisted of an inclined table, much narrower at the lower end than at the upper, and a strip nailed along each side so as to project about three inches above the surface. The "worker" was fastened loosely at the lower end and the other end left free for manipulation. Sometimes this worker was triangular, in cross-section, rather than round.